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# United States Patent [19]

Carlino et al.

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[54] **TREATMENT OF IMMUNOLOGIC AND HEMATOLOGIC DISORDERS WITH IGFBP ALONE OR COMPLEXED WITH IGF**

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**Related U.S. Application Data**

[63] Continuation of Ser. No. 124,410, Sep. 20, 1993, abandoned.

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[52] **U.S. Cl.** ..... **514/12**; 530/324; 530/350; 530/399

[58] **Field of Search** ..... 530/324, 350, 530/399; 514/12

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[57] **ABSTRACT**

This invention includes a method of treating subjects with immunologic and hematologic disorders, such as immune deficiencies and anemias characterized by deficient total hemoglobin. The treatment includes administering to the subject insulin-like growth factor binding protein-3 (IGFBP-3), alone or in a complex including an insulin-like growth factor (IGF), in an amount sufficient to improve the immunologic and/or hematologic disorder, for example, increasing the level of total hemoglobin or improving immune deficiencies, such as occur post-chemotherapy. Another aspect of the invention includes administering IGFBP-3 alone to treat IGF-driven lymphoproliferative conditions, such as leukemias, inflammatory skin diseases, and nasal polyps.

**1 Claim, 3 Drawing Sheets**